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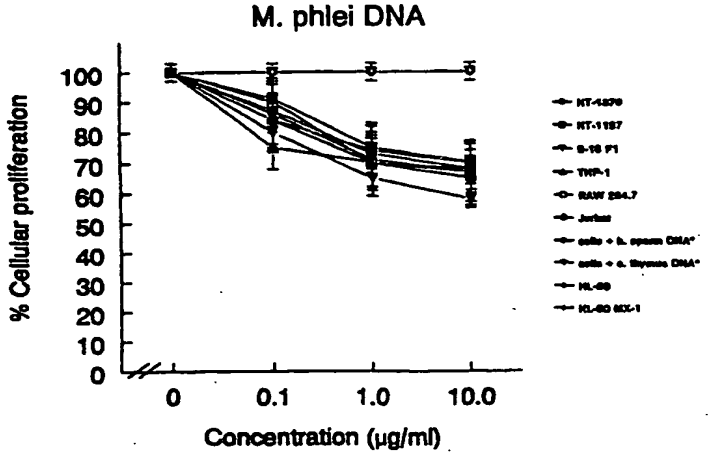
(54) Title: COMPOSITION AND METHOD FOR REGULATING CELL PROLIFERATION AND CELL DEATH



(57) Abstract

The present invention relates to a composition and method useful for regulating cell proliferation and cell death in a multicellular organism. The present invention particularly relates to a composition comprising a bacterial DNA (B-DNA) and a first pharmaceutically acceptable carrier, wherein the B-DNA induces a response in responsive cells of an animal. The present invention more particularly relates to a composition comprising a mycobacterial DNA (M-DNA) and a first pharmaceutically acceptable carrier, wherein the M-DNA inhibits proliferation of responsive cells of an animal, induces apoptosis in responsive cells of an animal, and stimulattes responsive cells of the immune system f an animal to produce bioactive molecules. Methods of making the M-DNA composition and methods of using the M-DNA composition also are disclosed.